

**MINUTES**  
**OF**  
**THE UTAH RADIATION CONTROL BOARD**

**June 1, 2007**

**Department of Environmental Quality, DEQ Building #2**

**Conference Room 101**

**168 N 1950 W**

**Salt Lake City, Utah 84114-4850**

**BOARD MEMBERS PRESENT**

Kent J. Bradford, P.G., Chair  
Dane L. Finerfrock, Executive Secretary  
Frank D. DeRosso, MSPH, C.I.H.  
Christian K. Gardner  
Elizabeth Goryunova, M.S.  
Peter A. Jenkins, M.S., CHP  
Joette E. Langianese, Commissioner (Attended by  
Conf. Call and Confirmed by Roll Call)  
Joseph K. Miner, M.D., MSPH  
Gregory G. Oman, D.D.S., B.S.  
Robert S. Pattison, B.Sc. (Attended by  
Conf. Call and Confirmed by Roll Call)  
John W. Thomson, M.D.  
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**PUBLIC**

Judy Fahys, Salt Lake Tribune  
Karen S. Langley, University of Utah  
Mark Ledoux, , EnergySolutions (E.S.)  
Tye Rogers, E.S.  
Dan Shrum, E.S.  
Christopher Thomas, HEAL UTAH

**BOARD MEMBERS ABSENT/EXCUSED**

Patrick D. Cone  
Dianne R. Nielson, Ph.D., Director of DEQ  
Stephen T. Nelson, Ph.D., Vice Chair

**DRC STAFF/OTHER DEQ MEMBERS  
PRESENT**

Craig Jones, Section Manager  
Loren Morton, Section Manager  
Yoli D. V. Necochea, DRC Staff  
Fred Nelson, Attorney General's Office  
William (Bill) J. Sinclair, DEQ Admin,  
Deputy Director

## **GREETINGS/MEETING CALLED TO ORDER**

The Utah Radiation Control Board convened in the Department of Environmental Quality (DEQ) Conference Room 101; 168 North 1950 West; DEQ Bldg. #2; Salt Lake City, Utah. Kent Bradford, Chair, called the meeting to order at 2:00 p.m. He welcomed the Board Members and the public. Chairman Bradford indicated that if the public wished to address any items on the agenda, they should sign the public sign-in sheet. Those desiring to comment would be given an opportunity to address their concerns during the public comment period.

### **I. APPROVAL OF MINUTES (Board Action Item)**

#### **a. Approval of the Minutes from the April 6, 2007 Board Meeting**

Kent Bradford, Chair, asked the Board for corrections to the minutes from May 4, 2007. There were no corrections to the minutes.

**MOTION MADE BY ELIZABETH GORYUNOVA, TO APPROVE THE MINUTES OF MAY 4, 2007.**

**MOTION WAS SECONDED BY GREGORY G. OMAN.**

**MOTION CARRIED AND PASSED UNANIMOUSLY**

### **II. RULES**

#### **a. Proposed Rule R313-16-230, Registration of Radiation Machines**

Craig Jones, Section Manager, explained to the Board that he would like them to consider two separate parts for this agenda item. He said that the first part involves the Board's approval of an exemption to an administrative rule, and the second part involves a proposed change to the administrative rule for registering x-ray machines.

Craig described how the annual registration process was completed at the beginning of the State Fiscal Year, and he noted that annual registration of x-ray tubes was required by rule. He explained that the rule is prescriptive because it specifies the registration interval to be July 1, through June 30, of the following year. Craig described the process of tracking money collected for the registration of x-ray machines. He said the current process has a major negative impact on the Division and he gave examples of some of the impacts. Some of the impacts included the need to assign DRC Staff from radiation, safety-inspection activities to registration duties; the need to employ additional personnel; and the added workload for those persons involved with writing the DRC's budget for the Department.

Craig asked for the Board's approval of the following issues:

- (1) Grant owners of x-ray units an exemption or exception to the registration requirement in R313-16-230.

- (2) Approve a proposed rulemaking change (contained in the Board information packet) for registering x-ray machines.

Craig said that the rulemaking will delay the registration process this calendar year. He explained that approval from the Board will give the Executive Secretary the authority to establish three-cycles of registration, and will give DRC Staff the flexibility they will need to be more efficient and effective in the registering x-ray machines.

**QUESTIONS BY THE BOARD:**

Peter Jenkins asked if this, “major change,” would have an effect on the Division’s budget.

Craig Jones responded, yes, that this would be a significant change in the budgeting process over the course of a fiscal year. He said that the proposed changes would allow for a large majority of the fees to be collected before a new fiscal year begins. He also said that, for those registrants who are delayed in sending their payment, the money collected in one year will be accounted for in the next fiscal year. Craig said that after one business-cycle, the process should “even itself out;” consequently, we do not expect to see a negative impact on the budget.

**RECOMMENDATIONS:**

1. The Executive Secretary recommended that the Board exempt registrants from the current registration interval.
2. The Executive Secretary recommended that the Board approve the proposed changes to the Utah Radiation Control Rules; direct Staff to file the changes for rulemaking; and direct Staff to commence a public notice with a 30-day comment period.

**MOTION MADE BY GREGORY OMAN TO APPROVE THE EXEMPTION OF REGISTRANTS FROM THE CURRENT REGISTRATION INTERVAL. ALSO, THAT THE BOARD APPROVES THE PROPOSED CHANGES FOR RULEMAKING, AND DIRECTS STAFF TO GIVE NOTICE TO THE PUBLIC OF A 30-DAY COMMENT PERIOD.**

**MOTION WAS SECONDED BY JOHN THOMSON.**

**MOTION CARRIED AND PASSED UNANIMOUSLY**

**b. Proposed Rule R313-16-100, “Transportation”**

Gwyn Galloway, DRC Health Physicist, informed the Board on this item. She said that the U.S. Department of Transportation changed their regulations, in order to meet international standards. Approximately three years ago, the U.S. Nuclear Regulatory Commission (NRC) modified U.S. transportation regulations to meet international requirements as well.

When the NRC modifies U.S. regulations, the Division has three-years from the “effective date” of the new requirements to become compatible. The three-year timeframe is approaching; consequently, the Division's rules must be modified to meet the NRC's compatibility requirements. The proposed rules will satisfy the NRC’s compatibility standards. Therefore, the Board is asked to approve the proposed rules, and that the proposed rules proceed to a 30 day public comment period.

**RECOMMENDATION:**

The Executive Secretary recommended that the Board approve the proposed changes to the Utah Radiation Control Rules; and direct Staff to file the changes for rulemaking; and direct Staff to give notice to the public of a 30-day comment period.

**MOTION MADE BY FRANK DEROSSO TO CHANGE THE RULES TO MEET U.S. NRC STANDARDS AND TO SEND THEM OUT FOR PUBLIC COMMENT.**

**MOTION WAS SECONDED BY ELIZABETH GORYUNOVA**

**MOTION CARRIED AND PASSED UNANIMOUSLY**

**III. RADIOACTIVE MATERIALS LICENSING/INSPECTION**

**No Items**

**IV. X-RAY REGISTRATION/INSPECTION**

**No Items**

**V. RADIOACTIVE WASTE DISPOSAL**

**a. Update of Volumes Disposed at EnergySolutions (E.S.)**

Tye Rogers, EnergySolutions’ Senior Vice President of Regulatory Affairs, made this presentation to the Board:

- Annual Disposal Volumes from 2000 to 2007
- January – May Disposal Volumes from 2000 to 2007
- Annual Disposal Volume (2007 Estimated)  
from 2000 to 2007
- Map of EnergySolutions’ (E.S.) Clive Site
  - Class A North, 1,705,000 yr<sup>3</sup>, Remaining Capacity
  - Class A 933.787 yr<sup>3</sup>, Remaining Capacity
  - 11e(2) 3,699, 375 yr, (171,000 cubic feet)  
Remaining Capacity
  - LARW Cell – Closed
  - Mixed Waste Cell – 354,277 r<sup>3</sup>, Remaining Capacity
- E.S. Volume Comparisons

- LARW and Class A Cells
  - Went over Years From 2001 thru 2005
  - Volume Manifest (1) [yd<sup>3</sup>]
  - Total Volume Placed (2)
  - Percent
  - Description
- Perpetual Care Fund Update, to be presented to the Board at the August 2007 Board Meeting

**b. Renewal of EnergySolutions' (E.S.) Low-Level, Radioactive Waste (LLRW) Disposal License**

Loren Morton, Section Manager, presented the following item to the Board. He explained that the license renewal-process had been long. He proceeded to give the Board a “chronology-report” on the license renewal and the plans for the future:

July 2003 – DRC received the license renewal-application from EnergySolutions (E.S.)

March 2004 – The DRC reviewed the renewal-application, and set-up a renewal contract

July 2004 – E.S. provided supplementary information

October 2004 - DRC provided comments to E.S.

November 2004 - URS (DRC) plans a process of interviews out at the site to talk to people “on the ground” about their responsibilities and their duties. This was designed as an opportunity for DRC to assist with “quality improvement.”

May 2005 - URS (DRC) completes the interview process

June 2005 – E.S. makes a second revision to the renewal application.

July 2005 – DRC provides E.S. with a list of “open issues” that still had not been resolved

August 2005 – E.S. provides a response to “LRA Open-Issues”

September 2005 - URS delivers their response to the “LRA Open-Issues” to the DRC (The “LRA Open-Issues Document” is a document that describes all DRC’s technical-basis findings and the regulatory requirements, and how they’ve been satisfied).

May 2006 - The Division intentionally delayed EnergySolutions' license renewal, in order to resolve long-term stability of the disposal embankments (with regards to nearby mining excavations--these are nearby borrow pits that have been constructed both inside and outside of Section 32, which support the disposal activities described by Tye Rogers). The DRC had concerns about potential impacts of the borrow pits on nearby groundwater hydraulics and potential erosion by surface water. This is a "future possibility" not a current concern. The Division wanted these potential-issues evaluated and resolved before the license was renewed.

February 2007 - DRC receives a partial resolution. E.S. proposed backfilling the borrow pits inside Section 32 as part of a "surety process." This resolved part of the problem, and it helped "break a log jam." The other unresolved issue was the borrow pit excavations outside of Section 32. The DRC will require the licensee to do more studies and to evaluate their impact further. These studies will be carried forward as conditions in the license.

April 2007 - URS delivered a second draft of the Safety Evaluation Report (SER) to the DRC.

May 2007 - The DRC Staff reviewed the second draft and asked URS to make final revisions

June 2007 – DRC projects having the SER finalized by June 8, 2007

June 15, 2007 - will be the beginning of a 60-day public comment period. There will be a public notice in the newspapers; posting on our web page; and the DRC will use the electronic mail-server to notify interested-public by e-mail.

August 2007 - Once the DRC has received and resolved any public comments, the DRC should close-out the license renewal by the middle of August 2007.

**Questions by Board Members:**

Kent Bradford, Chairman, asked Loren to help him understand. He asked what the original expiration term was for the EnergySolutions' (E.S.) license. He asked if it expired in 2003 or 2004.

Loren Morton, Section Manager, explained that the license had a five-year term. He said that E.S. was required to submit license renewals 6-months before expiration, which would have been by the end of 2003. E.S. submitted the license renewal application in a timely manner in July 2003; consequently, E.S. is operating under "timely-renewal status."

Loren explained that DRC's review of the license renewal-application had taken approximately 4 years. He said that once the license renewal is executed, it will be effective for 5 more years. He said there was an issue with grade restoration, and this had to be resolved before the DRC could move forward. Finally, the "log jam" was resolved, and now we are moving forward. No one can forecast what the next five-years will bring (with what the licensee is doing and what "new knowledge" that may "come into play").

Dane Finerfrock, Executive Secretary, explained that this was the second renewal for the original license. He said it had taken longer than the first renewal. He said, hopefully, there would never be another E.S. license renewal that will take four years to complete.

Dane said one of the purposes of renewal is to examine any changes in conditions that have evolved at the site during the "active licensing period." It is also to examine any new knowledge or information that has been gained; for instance, if there had been an extensive geotechnical or seismic evaluation completed on that part of the State, it might be taken into consideration during the renewal process. One issue that has not been resolved was the restoration of grade. It is part of the long-term performance of the facility, and I made the decision that I would not "closeout the license-renewal," until that aspect was resolved. As Loren said, "we broke the log-jam."

Loren Morton added that the license would be going forward, and it would have a five-year cycle from the date of renewal. In addition all public comments would be resolved, and after the public comment, the DRC would issue and execute a new license. Loren explained that the Board could be involved in the license process, if there were any appeals after the public comment was completed.

**VI. URANIUM MILL LICENSING AND INSPECTION**

No Items

**VII. OTHER DIVISION ISSUES**

**VIII. PUBLIC COMMENT**

Christopher Thomas, HEAL UTAH, asked about the volume analysis that Tye Rogers presented earlier. Mr. Thomas asked if there were a difference in the methodology for the current volume analysis at EnergySolutions (E.S.) as opposed to the methodology used for the analysis completed in the fall of 2006.

Dane Finerfrock, Executive Secretary, responded that both the analyses were completed by E.S. He said the Division had no involvement, other than to discuss

the decreasing-trends in waste volumes with E.S. He said, “as Tye Rogers explained,” the license requires E.S. to submit “as-built drawings” based on aerial surveys. As part of E.S.’s license submission, they also calculated the remaining volumes at the site.

Dane said the DRC had conducted a through review. Based on the review, he said the Division will calculate the remaining waste-capacity available at E.S. He said the remaining waste-capacity has implications for the Department and for the Perpetual Care Fund. Tye Rogers and E.S. are using the same aerial survey that the Division is using, as part of the regulatory requirements; consequently, there is not a discrepancy.

Christopher Thomas asked about Loren Morton’s presentation—particularly about the internal and external excavations in Section 32. He asked for clarification about what it meant, and if the issue had been resolved?

Dane Finerfrock, Executive Secretary, responded that the excavations external to Section 32 had not been resolved. He said the Division would need to draft a license condition that would allow for precipitation that may infiltrate and change in the direction of groundwater flow. He said the Division has to be able to monitor the site, and in order to monitor the site the Division needs to know the groundwater flow, in case there is a disruption or a change. Likewise, precipitation can cause under-cutting of banks; consequently, the Division needs to know, if water levels are close enough to undercut Section 32. These are the issues the Division will be evaluating.

#### **IX. OTHER ISSUES**

Because of the July 4, 2007 Independence Day Holiday, the Board canceled the July 6, 2007 Board Meeting. The next scheduled Board Meeting will be held on August 3, 2007, DEQ Bldg #2, Conference Room 101, 168 North 1950 West, Salt Lake City, Utah, 2:00 – 4:00 P.M.

**THE BOARD MEETING ADJOURNED AT 2:46 P.M.**